

The background is a solid orange color with several thin, white, curved lines that sweep across the left side of the image, creating a sense of motion or aerodynamic flow.

# AEROSPACE ENGINEER

# Aerospace Engineer

Aerospace Engineers design, create and test aircraft, spacecraft and missiles. Aerospace Engineers create new technologies for use in aircraft, defense systems and space exploration. They work in areas such as structural design, guidance, navigation and control, instruments and communication. They may also work in a particular type of aerospace product, such as commercial aircraft, military fighter jets, helicopters, spacecraft or missiles and rockets.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



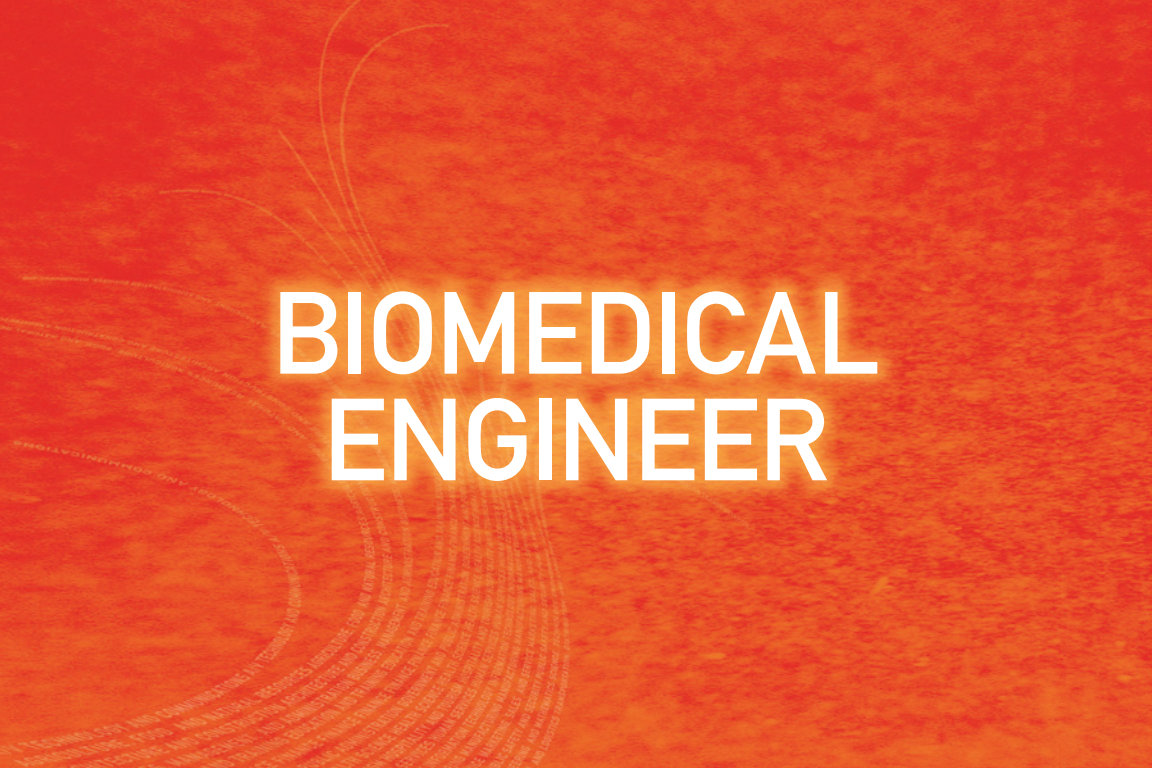
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# BIOMEDICAL ENGINEER

# Biomedical Engineer

Biomedical Engineers develop tools and procedures that solve medical and health-related problems by putting their knowledge of biology and medicine together with engineering principles and practices. Biomedical Engineers do research, along with life scientists, chemists and medical scientists, to create and test systems, tools and products like artificial organs, replacement arms and legs, medical information systems and health-management and care-delivery systems.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



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**CIVIL ENGINEER**

# Civil Engineer

Civil Engineers design and watch over the construction of roads, buildings, airports, tunnels, dams and bridges, as well as water supply and sewage systems. They must consider many factors in the design process, from the construction costs and expected lifetime of a project to government laws and possible environmental issues, including earthquakes and hurricanes. Civil engineering is one of the oldest areas of engineering and has many specialties. These specialties include structural, water resources, construction, environmental and transportation.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



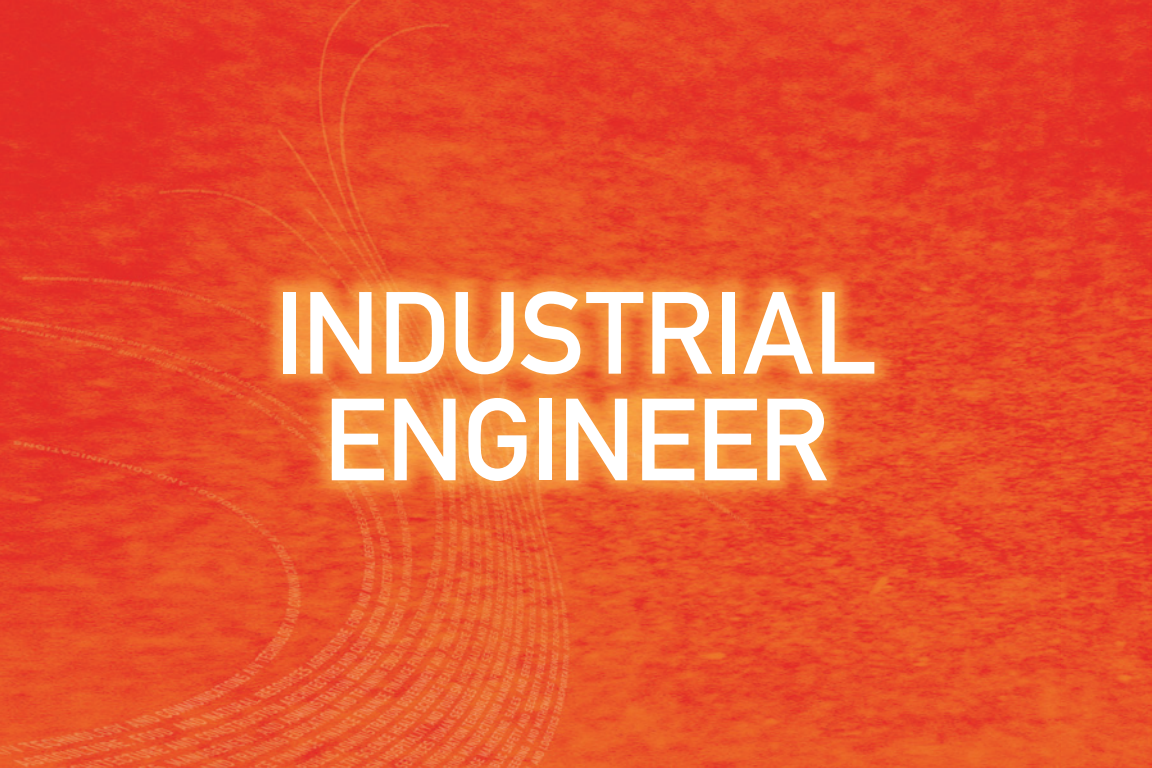
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# INDUSTRIAL ENGINEER

# Industrial Engineer

Industrial Engineers figure out the best ways to use the basic factors of production—people, machines, materials, information and energy—to make a product or provide a service. They try to increase production through the management of people, methods of business organization and technology. To work best, Industrial Engineers study business requirements and design systems to meet goals with the help of math and process models.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



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The background is a solid orange color. On the left side, there are several white, curved lines that sweep upwards and to the right, resembling mathematical curves or orbits. These lines are of varying thickness and curvature, creating a sense of dynamic movement. The word "MATHEMATICIAN" is centered in the middle of the image in a bold, white, sans-serif font.

# MATHEMATICIAN

# MATHEMATICIAN

## Mathematician

Mathematics is a wide field that is used in many types of jobs. Mathematicians use mathematical theory, techniques, rules and the latest computer technology to solve economic, scientific, engineering, physics and business problems. While most scientific theories are tested by experiments, mathematical statements are often backed up by well-researched theories. Mathematicians can use their skills in many career fields, including physics, computer science and chemistry.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



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# MECHANICAL ENGINEER

# Mechanical Engineer

Mechanical Engineers research, design, build and test tools, engines, machines and other mechanical devices. Mechanical Engineers often work on power-producing machines such as generators and engines. They also work on electric-powered machines such as refrigeration and air-conditioning equipment, machine tools, material-handling systems, elevators and escalators, industrial production equipment and robots used in manufacturing. Mechanical Engineers also design tools that other engineers need for their work.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



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# PHYSICIST

# Physicist

Physicists explore and identify basic principles and laws governing the motion, energy, structure and interactions of matter. Some Physicists study areas that are not totally understood to help give us a better understanding of things like the nature of time, space and the origin of the universe. Often Physicists apply their knowledge of physics to other areas, such as creating new materials, electronic devices and medical equipment.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



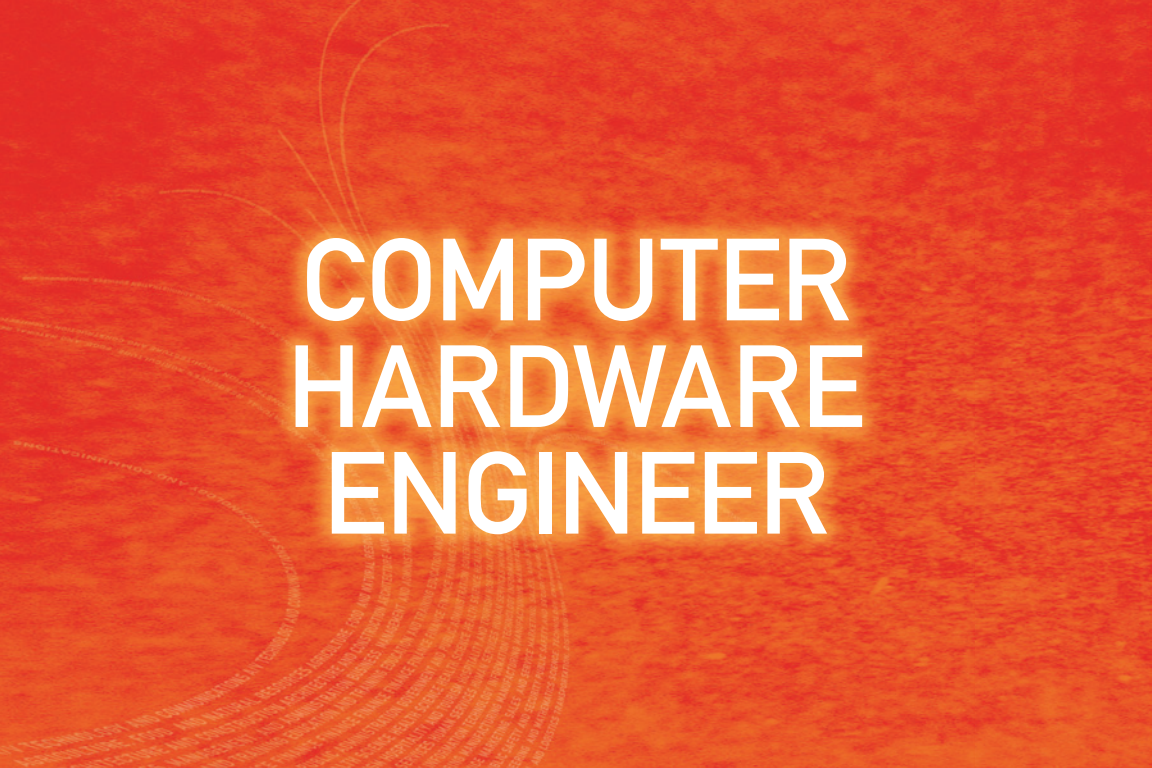
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# COMPUTER HARDWARE ENGINEER

# Computer Hardware Engineer

Computer Hardware Engineers research, design, test and watch over the creation and installation of computer hardware. This hardware includes computer chips, circuit boards, computer systems and related equipment such as keyboards, modems and printers. Computer technology quickly changes because of the research, development and design work of Computer Hardware Engineers.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree



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The background is a solid orange color with a subtle, grainy texture. On the left side, there are several thin, white, curved lines that sweep upwards and to the right, creating a sense of motion or a stylized representation of a meteor or a comet's tail. The word "METEOROLOGIST" is centered in the middle of the image in a bold, white, sans-serif font.

**METEOROLOGIST**

# Meteorologist

Meteorologists study the atmosphere's physical characteristics, motions, processes and how these things affect our environment. Forecasting the weather is one of their most important jobs. Meteorologists also identify and interpret climate trends, understand past weather patterns and figure out today's weather. Weather information and meteorological research are also used in air pollution control, agriculture, forestry, air and sea transportation, defense and the study of possible trends in the Earth's climate.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree



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# OCEANOGRAPHER

# Oceanographer

Oceanographers use their knowledge of geology, physics, biology and chemistry to study the world's oceans and coastal waters. They study the motion and physical and chemical properties of the oceans and how they affect coastal areas, climate and weather. Oceanographers may work on special areas depending on location and interest.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree



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# ZOOLOGIST

# Zoologist

Zoologists study the biology of animals, like mammals or reptiles. They study the animal's relationships, histories, life cycles and diseases. Some work with live animals in natural environments while others study the biology of a specific animal. Zoologists are usually identified by the animal group they study: ornithologists (birds), mammalogists (mammals), herpetologists (reptiles) and ichthyologists (fish).

Education Requirements: Four-Year Bachelor's degree,  
Master's degree



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# MARINE BIOLOGIST

# MARINE BIOLOGIST

## Marine Biologist

Marine Biologists study the plants and animals that live in salt water. Their knowledge helps doctors, veterinarians and environmental scientists in their work. Most of the marine biology work centers around the processes that take place inside living cells. While much of the Marine Biologist's research is done in a laboratory, trips to saltwater habitats are often needed.

Education Requirements: Four-Year Bachelor's degree



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# STATISTICIAN

# STATISTICIAN

## Statistician

Statisticians collect, organize and present data to help people understand how and why things happen. Sometimes the data can even help predict if something will happen again. People use data from Statisticians to solve problems and make decisions in a lot of different subjects and industries, including biology, economics, engineering, medicine, public health, psychology, marketing, education, sports and more. Good knowledge of mathematics and computers is important in this field.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree



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# CHEMIST

# CHEMIST

## Chemist

Chemists are often involved in research and development to look into the elements that make up substances and study the changes these liquids or powders undergo. Chemists also create and watch over chemicals in manufacturing plants. They play an important role in areas such as medicine, the environment, agriculture and industry. Chemists often work alone, although they may work with other scientists, engineers and technicians during certain parts of the research. They may be in charge of watching over chemical technicians and other workers.

Education Requirements: Four-Year Bachelor's degree,  
Master's degree,  
Doctoral degree



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# LABORATORY TECHNICIAN

# Laboratory Technician

Laboratory Technicians do tests and other experiments in labs. Technicians may get samples ready and operate testing machinery or they may do tests by hand. They usually work under the supervision of medical and clinical laboratory technologists or laboratory managers. Lab Technicians may work in several areas of the laboratory.

Education Requirements: Two-Year's Associate's degree



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